



NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Work Order ID 96436

**\*96436\***

Page 2

January-28-13 11:52:10 AM

Item ID: D4171-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Bushing

Stop **\*NS2\***

Start Date: 1/25/13

Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 2/08/13

Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

Identify as per dwg & Stock Location: ST 102 0.00

**\*200\***

Packaging

Memo

0.00

Packaging

20y

SP  
13-3-18

210

QC21- Final Inspection - Work Order Release

0.00

**\*210\***

QC

Memo

0.00

Quality Control

13/3/2013  
ME  
13-3-20

NCR: Yes / No

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# Picklist Print

January-28-13 11:52:10 AM

Page 1

Work Order ID: 96436

Parent Item: D4171-1

Parent Item Name: Bushing

Start Date: 1/25/13

Required Date: 2/08/13

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP REV:A NEW ISSUE 10-09-22 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R1.000 303 Round Bar 1.00		Purchased	No			100	f	44.0269	0.08	2.526315			

## Location

## Loc Qty

## Loc Code

MAT028

44.02691579

120866

1.4

121070

6.63031579

121282

0.9

121728

3.034

122386

14.926

123294

17.1366

304 R 100

This batch only.

13-3-18

See Attached  
Dwg JLM

123213

2.5 PK

13-3-18

DAS  
13  
2-89

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Operator									
Material									
Setup									
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Process									
Supplier									
Training									
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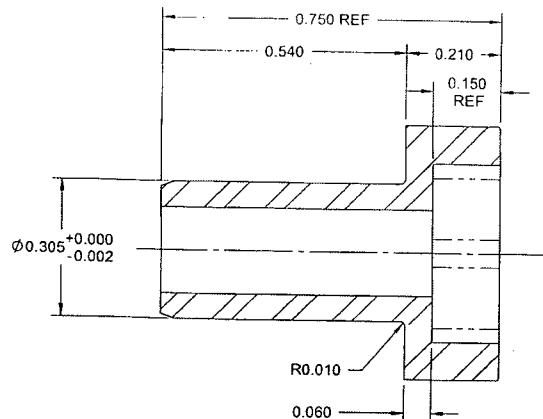
<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	96436
<b>Description:</b> Bushing		<b>Part Number:</b>	D4171-1
<b>Inspection Dwg:</b> D4171 <b>Rev:</b> A		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

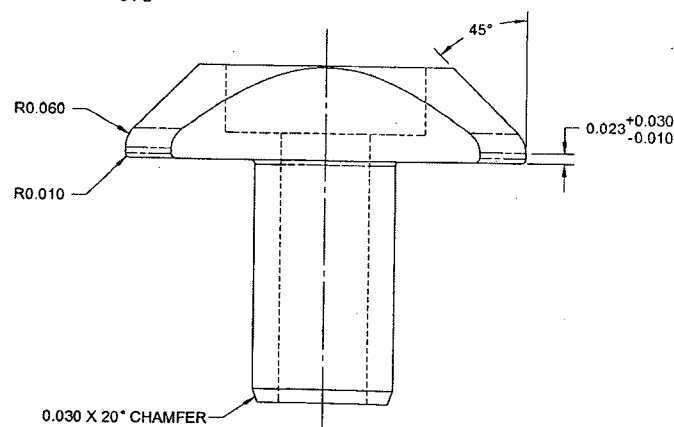
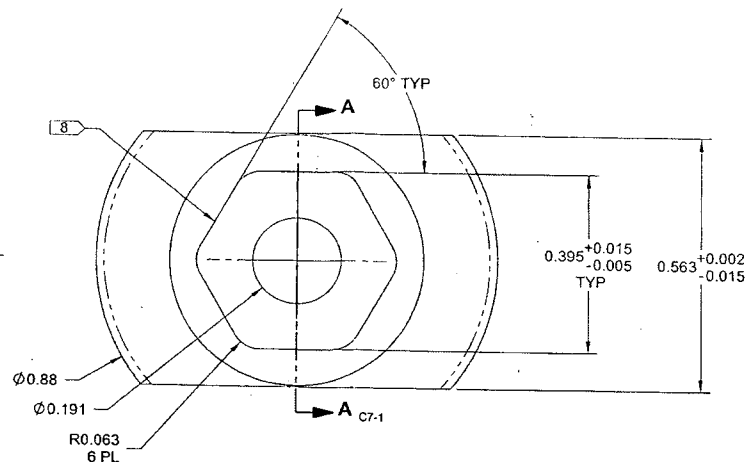
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.750	+/-0.010	0.748	/		SA-4	U/L
0.540	+/-0.010	0.540	/			
0.210	+/-0.010	0.208	/			
0.150	+/-0.010	0.151	/			
Ø0.305	+0.000/-0.002	Ø0.304	/			
R0.010	+/-0.010	R0.015	/			
0.060	+/-0.010	0.060	/			
0.395	+0.015/-0.005	0.397	/			
0.563	+0.002/-0.015	0.553	/			
Ø0.88	+/-0.030	0.880	/			
Ø0.191	+0.005/-0.001	0.192	/			
R0.063	+/-0.010	R0.063	/			
R0.060	+/-0.010	R0.060	/			
45°	+/-0.5°	45°	/			
0.023	+0.030/-0.010	0.030	/			
0.030 x 20°	+/-0.010 x 0.5°	0.03 x 20°	/			

<b>Measured by:</b>	DAS	<b>Audited by:</b>	DAS	<b>Preliminary Approval:</b>	
<b>Date:</b>	13-3-17	<b>Date:</b>	25-8-89	<b>Date:</b>	

Rev	Date	Change	Revised by	Approved
A	10.10.25	New Issue	KJ	MA



C4-1 **SECTION A-A**

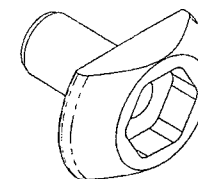


**D4171-1 BUSHING**

**NOTES:**

- 1) MATERIAL: AISI 303 STAINLESS STEEL ROUND BAR PER ASTM A582 REF DART SPEC M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs
- 8) HEXAGON/HOLE MUST ALLOW INSERTION OF AN3 BOLT.

*304 ACCEPTABLE*  
*MP*  
*13/3/18*



ALL COPY  
FOR THE  
ENGINEERING  
DEPARTMENT  
ONLY FOR COPY  
FOR THE  
DESIGN DEPARTMENT  
WITHOUT THE  
WORK ORDER  
**96436 MJS**  
**13-01-29**

**RELEASED**  
2010-09-15  
*JM*

A	NEW ISSUE	CP	10.08.28
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN	<i>JP</i>		
CHECKED			
MFG. APPR.			
APPROVED	<i>MP</i>		
DE APPR.			
DATE	10.08.28		

<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. <b>D4171</b>	REV. A
TITLE <b>BUSHING</b>	SHEET 1 OF 1
SCALE NTS	

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